

What is claimed is:

1. A CDMA base station apparatus comprising:
first transmission power control means for
5 carrying out transmission power control between a mobile
station and base station according to a transmission
power control signal mixed into a reception signal;

reception quality estimation means for estimating
the reception quality of the reception signal; and
10 second transmission power control means for
carrying out transmission power control to reduce the
transmission power to said communication destination
when said estimated reception quality is low.

2. A CDMA base station apparatus comprising:
15 first transmission power control means for
carrying out transmission power control between a mobile
station and base station according to a transmission
power control signal mixed into a reception signal;

reception power measuring means for measuring the
20 reception power of the reception signal; and

second transmission power control means for
carrying out transmission power control to reduce the
transmission power to said communication destination
when said measured reception power is low.

25 3. A CDMA base station apparatus comprising:
first transmission power control means for
carrying out transmission power control between a mobile
station and base station according to a transmission

power control signal mixed into a reception signal;

time difference measuring means for measuring a time difference between the reception timing of the reception signal and transmission timing of the

5 transmission signal; and

second transmission power control means for carrying out transmission power control to reduce the transmission power to said communication destination when said measured time difference is large.

10 4. The CDMA base station apparatus according to claim 1, wherein transmission power control by said first transmission power control means and second transmission power control means is carried out by a single amplifier and at the same time a reduction of transmission power
15 by said second transmission power control means is carried out by adjusting the offset value of said amplifier.

20 5. A CDMA base station apparatus, wherein transmission power control is carried out by the CDMA base station apparatus according to claim 1 when a handover takes place.

25 6. A CDMA base station apparatus, wherein transmission power is increased only when both a transmission power control signal received from a base station apparatus according to claim 1, the origin of movement when a handover takes place, and a transmission power control signal received from another base station apparatus according to claim 1, the destination of

movement contain commands to increase transmission power.

7. A transmission power control method, wherein first transmission power control is performed according to a transmission power control signal mixed into the reception signal, and if a base station is far from a mobile station, second transmission power control is performed to reduce the transmission power.

8. The transmission power control method according to claim 7, wherein the distance estimation in the second transmission power control is performed by estimating the reception quality of said received uplink signal or downlink signal by an SIR measurer, and if the estimated reception quality is low, the transmission power to the communication destination is reduced.

9. The transmission power control method according to claim 7, wherein the distance estimation in the second transmission power control is performed by measuring the reception power of said received uplink signal or downlink signal, and if the measured reception power is low, the transmission power to the communication destination is reduced.

10. The transmission power control method according to claim 7, wherein the distance estimation in the second transmission power control is performed by measuring the time difference between the reception timing of the reception signal and the transmission timing of the transmission signal, and if the measured

time difference is large, the transmission power to the communication destination is reduced.

11. A handover control method, wherein the total amount of transmission power during a handover is
5 suppressed by using the transmission power control method according to claim 7 during the handover.

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